

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/586,704A
Source: 1FW16
Date Processed by STIC: 1/11/05

ENTERED

RAW SEQUENCE LISTING

DATE: 01/11/2005

PATENT APPLICATION: US/09/586,704A

TIME: 12:30:05

Input Set : A:\600-1-081CON REV3 SEQLIST.TXT

Output Set: N:\CRF4\01112005\I586704A.raw

P.6

RAW SEQUENCE LISTING

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```

64 Pro Leu Ser Asp Trp Val Val Ala Gln Asp Cys Ser Gly Thr Asn Asn
65 ---50                      55                      60---
66 Met Leu Trp Lys Trp Val Ser Gln His Arg Leu Phe His Leu Glu Ser
67 65                      70                      75                      80
68 Gln Lys Cys Leu Gly Leu Asp Ile Thr Lys Ala Thr Asp Asn Leu Arg
69                      85                      90                      95
70 Met Phe Ser Cys Asp Ser Thr Val Met Leu Trp Trp Lys Cys Glu His
71                      100                     105                     110
72 His Ser Leu Tyr Thr Ala Ala Gln Tyr Arg Leu Ala Leu Lys Asp Gly
73                      115                     120                     125
74 Tyr Ala Val Ala Asn Thr Asn Thr Ser Asp Val Trp Lys Lys Gly Gly
75 130                     135                     140
76 Ser Glu Glu Asn Leu Cys Ala Gln Pro Tyr His Glu Ile Tyr Thr Arg
77 145                     150                     155                     160
78 Asp Gly Asn Ser Tyr Gly Arg Pro Cys Glu Phe Pro Phe Leu Ile Gly
79                      165                      170                      175
80 Glu Thr Trp Tyr His Asp Cys Ile His Asp Glu Asp His Ser Gly Pro
81                      180                      185                      190
82 Trp Cys Ala Thr Thr Leu Ser Tyr Glu Tyr Asp Gln Lys Trp Gly Ile
83                      195                      200                      205
84 Cys Leu Leu Pro Glu Ser Gly Cys Glu Gly Asn Trp Glu Lys Asn Glu
85                      210                      215                      220
86 Gln Ile Gly Ser Cys Tyr Gln Phe Asn Asn Gln Glu Ile Leu Ser Trp
87 225                      230                      235                      240
88 Lys Glu Ala Tyr Val Ser Cys Gln Asn Gln Gly Ala Asp Leu Leu Ser
89                      245                      250                      255
90 Ile His Ser Ala Ala Glu Leu Ala Tyr Ile Thr Gly Lys Glu Asp Ile
91                      260                      265                      270
92 Ala Arg Leu Val Trp Leu Gly Leu Asn Gln Leu Tyr Ser Ala Arg Gly
93                      275                      280                      285
94 Trp Glu Trp Ser Asp Phe Arg Pro Leu Lys Phe Leu Asn Trp Asp Pro
95                      290                      295                      300
96 Gly Thr Pro Val Ala Pro Val Ile Gly Gly Ser Ser Cys Ala Arg Met
97 305                      310                      315                      320
98 Asp Thr Glu Ser Gly Leu Trp Gln Ser Val Ser Cys Glu Ser Gln Gln
99                      325                      330                      335
100 Pro Tyr Val Cys Lys Lys Pro Leu Asn Asn Thr Leu Glu Leu Pro Asp
101                      340                      345                      350
102 Val Trp Thr Tyr Thr Asp Thr His Cys His Val Gly Trp Leu Pro Asn
103                      355                      360                      365
104 Asn Gly Phe Cys Tyr Leu Leu Ala Asn Glu Ser Ser Ser Trp Asp Ala
105                      370                      375                      380
106 Ala His Leu Lys Cys Lys Ala Phe Gly Ala Asp Leu Ile Ser Met His
107 385                      390                      395                      400
108 Ser Leu Ala Asp Val Glu Val Val Val Thr Lys Leu His Asn Gly Asp
109                      405                      410                      415
110 Val Lys Lys Glu Ile Trp Thr Gly Leu Lys Asn Thr Asn Ser Pro Ala
111                      420                      425                      430
112 Leu Phe Gln Trp Ser Asp Gly Thr Glu Val Thr Leu Thr Tyr Trp Asn

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113          435          440          445
114 Glu Asn Glu Pro Ser Val Pro Phe Asn Lys Thr Pro Asn Cys Val Ser
115          450          455          460
116 Tyr Leu Gly Lys Leu Gly Gln Trp Lys Val Gln Ser Cys Glu Lys Lys
117 465          470          475          480
118 Leu Arg Tyr Val Cys Lys Lys Lys Gly Glu Ile Thr Lys Asp Ala Glu
119          485          490          495
120 Ser Asp Lys Leu Cys Pro Pro Asp Glu Gly Trp Lys Arg His Gly Glu
121          500          505          510
122 Thr Cys Tyr Lys Ile Tyr Glu Lys Glu Ala Pro Phe Gly Thr Asn Cys
123          515          520          525
124 Asn Leu Thr Ile Thr Ser Arg Phe Glu Gln Glu Phe Leu Asn Tyr Met
125          530          535          540
126 Met Lys Asn Tyr Asp Lys Ser Leu Arg Lys Tyr Phe Trp Thr Gly Leu
127 545          550          555          560
128 Arg Asp Pro Asp Ser Arg Gly Glu Tyr Ser Trp Ala Val Ala Gln Gly
129          565          570          575
130 Val Lys Gln Ala Val Thr Phe Ser Asn Trp Asn Phe Leu Glu Pro Ala
131          580          585          590
132 Ser Pro Gly Gly Cys Val Ala Met Ser Thr Gly Lys Thr Leu Gly Lys
133          595          600          605
134 Trp Glu Val Lys Asn Cys Arg Ser Phe Arg Ala Leu Ser Ile Cys Lys
135          610          615          620
136 Lys Val Ser Glu Pro Gln Glu Pro Glu Glu Ala Ala Pro Lys Pro Asp
137 625          630          635          640
138 Asp Pro Cys Pro Glu Gly Trp His Thr Phe Pro Ser Ser Leu Ser Cys
139          645          650          655
140 Tyr Lys Val Phe His Ile Glu Arg Ile Val Arg Lys Arg Asn Trp Glu
141          660          665          670
142 Glu Ala Glu Arg Phe Cys Gln Ala Leu Gly Ala His Leu Pro Ser Phe
143          675          680          685
144 Ser Arg Arg Glu Glu Ile Lys Asp Phe Val His Leu Leu Lys Asp Gln
145          690          695          700
146 Phe Ser Gly Gln Arg Trp Leu Trp Ile Gly Leu Asn Lys Arg Ser Pro
147 705          710          715          720
148 Asp Leu Gln Gly Ser Trp Gln Trp Ser Asp Arg Thr Pro Val Ser Ala
149          725          730          735
150 Val Met Met Glu Pro Glu Phe Gln Gln Asp Phe Asp Ile Arg Asp Cys
151          740          745          750
152 Ala Ala Ile Lys Val Leu Asp Val Pro Trp Arg Arg Val Trp His Leu
153          755          760          765
154 Tyr Glu Asp Lys Asp Tyr Ala Tyr Trp Lys Pro Phe Ala Cys Asp Ala
155          770          775          780
156 Lys Leu Glu Trp Val Cys Gln Ile Pro Lys Gly Ser Thr Pro Gln Met
157 785          790          795          800
158 Pro Asp Trp Tyr Asn Pro Glu Arg Thr Gly Ile His Gly Pro Pro Val
159          805          810          815
160 Ile Ile Glu Gly Ser Glu Tyr Trp Phe Val Ala Asp Pro His Leu Asn
161          820          825          830

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```

162 Tyr Glu Glu Ala Val Leu Tyr Cys Ala Ser Asn His Ser Phe Leu Ala
163      835      840      845
164 Thr Ile Thr Ser Phe Thr Gly Leu Lys Ala Ile Lys Asn Lys Leu Ala
165      850      855      860
166 Asn Ile Ser Gly Glu Glu Gln Lys Trp Trp Val Lys Thr Ser Glu Asn
167 865      870      875      880
168 Pro Ile Asp Arg Tyr Phe Leu Gly Ser Arg Arg Arg Leu Trp His His
169      885      890      895
170 Phe Pro Met Thr Phe Gly Asp Glu Cys Leu His Met Ser Ala Lys Thr
171      900      905      910
172 Trp Leu Val Asp Leu Ser Lys Arg Ala Asp Cys Asn Ala Lys Leu Pro
173      915      920      925
174 Phe Ile Cys Glu Arg Tyr Asn Val Ser Ser Leu Glu Lys Tyr Ser Pro
175      930      935      940
176 Asp Pro Ala Ala Lys Val Gln Cys Thr Glu Lys Trp Ile Pro Phe Gln
177 945      950      955      960
178 Asn Lys Cys Phe Leu Lys Val Asn Ser Gly Pro Val Thr Phe Ser Gln
179      965      970      975
180 Ala Ser Gly Ile Cys His Ser Tyr Gly Gly Thr Leu Pro Ser Val Leu
181      980      985      990
182 Ser Arg Gly Glu Gln Asp Phe Ile Ile Ser Leu Leu Pro Glu Met Glu
183      995      1000      1005
184 Ala Ser Leu Trp Ile Gly Leu Arg Trp Thr Ala Tyr Glu Arg Ile Asn
185      1010      1015      1020
186 Arg Trp Thr Asp Asn Arg Glu Leu Thr Tyr Ser Asn Phe His Pro Leu
187 1025      1030      1035      1040
188 Leu Val Gly Arg Arg Leu Ser Ile Pro Thr Asn Phe Phe Asp Asp Glu
189      1045      1050      1055
190 Ser His Phe His Cys Ala Leu Ile Leu Asn Leu Lys Lys Ser Pro Leu
191      1060      1065      1070
192 Thr Gly Thr Trp Asn Phe Thr Ser Cys Ser Glu Arg His Ser Leu Ser
193      1075      1080      1085
194 Leu Cys Gln Lys Tyr Ser Glu Thr Glu Asp Gly Gln Pro Trp Glu Asn
195      1090      1095      1100
196 Thr Ser Lys Thr Val Lys Tyr Leu Asn Asn Leu Tyr Lys Ile Ile Ser
197 1105      1110      1115      1120
198 Lys Pro Leu Thr Trp His Gly Ala Leu Lys Glu Cys Met Lys Glu Lys
199      1125      1130      1135
200 Met Arg Leu Val Ser Ile Thr Asp Pro Tyr Gln Gln Ala Phe Leu Ala
201      1140      1145      1150
202 Val Gln Ala Thr Leu Arg Asn Ser Ser Phe Trp Ile Gly Leu Ser Ser
203      1155      1160      1165
204 Gln Asp Asp Glu Leu Asn Phe Gly Trp Ser Asp Gly Lys Arg Leu Gln
205      1170      1175      1180
206 Phe Ser Asn Trp Ala Gly Ser Asn Glu Gln Leu Asp Asp Cys Val Ile
207 1185      1190      1195      1200
208 Leu Asp Thr Asp Gly Phe Trp Lys Thr Ala Asp Cys Asp Asp Asn Gln
209      1205      1210      1215
210 Pro Gly Ala Ile Cys Tyr Tyr Pro Gly Asn Glu Thr Glu Glu Glu Val

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```

211          1220          1225          1230
212 Arg Ala Leu Asp Thr Ala Lys Cys Pro Ser Pro Val Gln Ser Thr Pro
213          1235          1240          1245
214 Trp Ile Pro Phe Gln Asn Ser Cys Tyr Asn Phe Met Ile Thr Asn Asn
215          1250          1255          1260
216 Arg His Lys Thr Val Thr Pro Glu Glu Val Gln Ser Thr Cys Glu Lys
217 1265          1270          1275          1280
218 Leu His Pro Lys Ala His Ser Leu Ser Ile Arg Asn Glu Glu Glu Asn
219          1285          1290          1295
220 Thr Phe Val Val Glu Gln Leu Leu Tyr Phe Asn Tyr Ile Ala Ser Trp
221          1300          1305          1310
222 Val Met Leu Gly Ile Thr Tyr Glu Asn Asn Ser Leu Met Trp Phe Asp
223          1315          1320          1325
224 Lys Thr Ala Leu Ser Tyr Thr His Trp Arg Thr Gly Arg Pro Thr Val
225          1330          1335          1340
226 Lys Asn Gly Lys Phe Leu Ala Gly Leu Ser Thr Asp Gly Phe Trp Asp
227 1345          1350          1355          1360
228 Ile Gln Ser Phe Asn Val Ile Glu Glu Thr Leu His Phe Tyr Gln His
229          1365          1370          1375
230 Ser Ile Ser Ala Cys Lys Ile Glu Met Val Asp Tyr Glu Asp Lys His
231          1380          1385          1390
232 Asn Gly Thr Leu Pro Gln Phe Ile Pro Tyr Lys Asp Gly Val Tyr Ser
233          1395          1400          1405
234 Val Ile Gln Lys Lys Val Thr Trp Tyr Glu Ala Leu Asn Ala Cys Ser
235          1410          1415          1420
236 Gln Ser Gly Gly Glu Leu Ala Ser Val His Asn Pro Asn Gly Lys Leu
237 1425          1430          1435          1440
238 Phe Leu Glu Asp Ile Val Asn Arg Asp Gly Phe Pro Leu Trp Val Gly
239          1445          1450          1455
240 Leu Ser Ser His Asp Gly Ser Glu Ser Ser Phe Glu Trp Ser Asp Gly
241          1460          1465          1470
242 Arg Ala Phe Asp Tyr Val Pro Trp Gln Ser Leu Gln Ser Pro Gly Asp
243          1475          1480          1485
244 Cys Val Val Leu Tyr Pro Lys Gly Ile Trp Arg Arg Glu Lys Cys Leu
245          1490          1495          1500
246 Ser Val Lys Asp Gly Ala Ile Cys Tyr Lys Pro Thr Lys Asp Lys Lys
247 1505          1510          1515          1520
248 Leu Ile Phe His Val Lys Ser Ser Lys Cys Pro Val Ala Lys Arg Asp
249          1525          1530          1535
250 Gly Pro Gln Trp Val Gln Tyr Gly Gly His Cys Tyr Ala Ser Asp Gln
251          1540          1545          1550
252 Val Leu His Ser Phe Ser Glu Ala Lys Gln Val Cys Gln Glu Leu Asp
253          1555          1560          1565
254 His Ser Ala Thr Val Val Thr Ile Ala Asp Glu Asn Glu Asn Lys Phe
255          1570          1575          1580
256 Val Ser Arg Leu Met Arg Glu Asn Tyr Asn Ile Thr Met Arg Val Trp
257 1585          1590          1595          1600
258 Leu Gly Leu Ser Gln His Ser Leu Asp Gln Ser Trp Ser Trp Leu Asp
259          1605          1610          1615

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/586,704A

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; Xaa Pos. 1,2,4,5,6
Seq#:8; Xaa Pos. 2,4
Seq#:9; Xaa Pos. 1,2,4
Seq#:10; Xaa Pos. 1,3,4
Seq#:11; Xaa Pos. 1,2,4,5
Seq#:12; Xaa Pos. 2,4,5

VERIFICATION SUMMARY

DATE: 01/11/2005

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TIME: 12:30:06

Input Set : A:\600-1-081CON REV3 SEQLIST.TXT

Output Set: N:\CRF4\01112005\I586704A.raw

L:685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:717 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:733 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:750 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:767 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0